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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/786,096

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David P. Ramer

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2502

7590

03/09/2006

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EXAMINER

TSIDULKO, MARK

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/786,096

Applicant(s)

RAMER ET AL.

Examiner

Mark Tsidulko

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13 is/are allowed.
- 6) ☒ Claim(s) 14-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

Art Unit: 2875

### **DETAILED ACTION**

The submission of amendment filed on 12/21/05 is acknowledged. At this point claims 1, 14, 15, 22 and 25 have been amended and the remaining claims left unchanged. Thus, claims 1-28 are at issue in the instant application.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14, 17-20, 22, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramer et al. (US 6,286,979) in view of Sagawa (US 3,677,643) and McDermott (US 6,361,190).

Referring to Claims 14, 22 Ramer et al. disclose (Figs.2, 5A) a constructive occlusion lighting device including a light source [421], a diffusely reflective (col.2, lines 30, 31) optical cavity [415] having a wall, an aperture [423], a mask [419] outside the cavity, spaced from aperture, positioned relative to the aperture and having a reflective surface (col.11, lines 41, 42) and provided distribution of a second portion of the light emerging over the second field of illumination and a support for attaching the lighting device (col.16, lines 50-53) and means to provide the emission of a third portion of the light over a third field of illumination (col.12, lines 45-49, col.13, lines 65-67).

Art Unit: 2875

Ramer et al. discloses the instant claimed invention except for cavity wall having a white material providing at least 85% reflectivity and that the cavity exhibits a transmissive characteristic.

Sagawa discloses a white paint, having 85% reflectivity (col.3, lines 62-67).

McDermott discloses a lighting device wherein a reflective surface has a coating permitting a part of the emitted light to pass through the reflector to provide a more uniform distribution of the emitted light (col.2, lines 50-54).

Referring to Claims 17, 18 Ramer et al. disclose (Fig.5A0) the ports [425] and [426] and the deflectors [427] and [428].

Referring to Claim 19 Ramer et al. discloses the instant claimed invention except for that the cavity wall is white with reflectivity about 96%.

Sagawa discloses a white paint, having 85% reflectivity (col.3, lines 62-67).

Referring to Claim 20 Ramer et al. disclose that the mask is made of material having 99% reflectivity (col.6, line 33).

Referring to Claim 23 Ramer et al. ('979) disclose a baffle (col.18, lines 64-67) within a cavity. It is understood, that the baffle, which plays role of the additional diffuser can be located outside of the cavity, providing absolutely the same function for the system.

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the white paint, as taught by Sagawa, for the baffle and cavity wall of the device of Ramer et al., in order to obtain high reflectivity, and to provide the coating, as taught by McDermott, for the optical cavity of the device of Ramer et al., in order to obtain the uniform distribution of the emitted light.

Art Unit: 2875

Claims 21, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramer et al., Ju et al. and McDermott, as applied to claim 14 above, and further in view of Ramer et al. (US 5,967,652).

Ramer et al. ('979) discloses the instant claimed invention except for that the cavity wall and mask have 96% reflectivity.

Ramer et al. ('652) disclose that the cavity wall and mask have 99% reflectivity.

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the cavity wall and mask of ('979) made of material, as taught by ('652) in order to obtain high reflectivity.

Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramer et al. (US 6,286,979) in view of McDermott (US 6,361,190).

Referring to Claim 25 Ramer et al. disclose (Fig.5A) a light source [421], a diffusive reflector (mask) [419] for diffusely reflecting a light from the light source, a first transmissive diffuser (base) [413], a second diffuser (baffle) (col. col.18, lines 64-67) and a gap (not indicated by number) between the mask and the base.

Ramer et al. discloses the instant claimed invention except for that the cavity exhibits a transmissive characteristic.

McDermott discloses a lighting device wherein a reflective surface has a coating permitting a part of the emitted light to pass through the reflector to provide a more uniform distribution of the emitted light (col.2, lines 50-54).

Referring to Claim 26 Ramer et al. disclose (Fig.5A) a diffusely reflective cavity [415].

Art Unit: 2875

Referring to Claim 27 a baffle, as an additional diffuser inherently diffuses the light transmitted to the first field.

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the coating, as taught by McDermott, for the optical cavity of the device of Ramer et al., in order to obtain the uniform distribution of the emitted light.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ramer et al. in view of McDermott, as applied to claim 27 above, and further in view of Miller et al. (US 3,797,934).

Ramer et al. and McDermott disclose the instant claimed invention except for that the second diffuser is formed of a substantially white translucent material.

Miller et al. disclose a diffuser made of white translucent material in order to reduce the source concentration of a light emitted from the light source (col.4, lines 2-8).

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the second diffuser of Ramer et al. and McDermott made of white translucent material, as taught by Miller et al., in order to reduce the source concentration of a light emitted from the light source.

***Allowable Subject Matter***

Claims 1-13 are allowed.

The following is an examiner's statement of reasons for allowance:

Art Unit: 2875

Referring to Claim 1 the prior art of record fails to show an indirect lighting device including an optical cavity and a partially transmissive baffle positioned outside the cavity and between the cavity wall and the field of illumination.

Claims 2-13 are allowed as claims depended on claim 1.

Claims 15, 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Referring to Claim 15 the prior art of record fails to show an indirect lighting device including an optical cavity and a partially transmissive baffle positioned outside the cavity and between the cavity wall and the field of illumination.

Claim 16 is objected as claim depended on claim 15.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

Applicant's arguments with respect to claims 14, 25, 28 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2875

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Tsidulko whose telephone number is (571)272-2384. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300 for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M.T.  
February 24, 2006



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Supervisory Patent Examiner  
Technology Center 2800



Application/Control Number: 10/786,096

Page 8

Art Unit: 2875